

MINISTRY OF THE INTERIOR, EGYPT.

Department of Public Health.

Ninth Annual Report of the
OPHTHALMIC SECTION,
1921,

By the Director of Ophthalmic Hospitals.

Government Press, Cairo, 1922.

To be obtained, either directly or through any Bookseller, from
the GOVERNMENT PUBLICATIONS OFFICE, Ministry of Finance,
Dawawîn P.O., Cairo.

Price - - - - - P.T. 15.

Cairo, April 1, 1922.

SIR,

I have the honour to enclose my Report on the Ophthalmic Hospitals and on Ophthalmic Progress in Egypt during the year 1921.

I have the honour to be,

Sir,

Your obedient servant,

A. F. MACCALLAN,

Director of Ophthalmic Hospitals.

THE DIRECTOR GENERAL,

DEPARTMENT OF PUBLIC HEALTH,

CAIRO.

CONTENTS.

	PAGE.
FOREWORD	1
I.—OPHTHALMIC PROGRESS IN EGYPT	3
II.—ULCERATION OF THE CORNEA COMPLICATING CONJUNCTIVAL INFECTION	3
III.—CLINICAL CONDITIONS OF SPECIAL INTEREST	4
IV.—BLINDNESS IN EGYPT	5
V.—INCIDENCE OF PRIMARY GLAUCOMA IN EGYPT	7
VI.—PATHOLOGICAL REPORT	9
VII.—RESULT OF EXAMINATION AT THE CENTRAL MEDICAL COMMISSION OF VISUAL ACUITY AMONG CANDIDATES FOR POSTS IN THE GOVERNMENT SERVICE	9
VIII.—THE OPHTHALMOLOGICAL SOCIETY OF EGYPT	10
IX.—STATISTICAL TABLES :—	
I.—Synopsis of Work of Hospitals since the Year 1911	11
II.—Sources of Provision of Hospitals	12
III.—New Patients treated per Month	12
IV.—Number of Patients treated and Operations performed at the Ophthalmic Hospitals during 1921	13
V.—Average Number of Operations per Month at all Ophthalmic Hospitals during 1921	13
VI.—Conjunctival Micro-organisms found during 1921	14
VII.—Relation of Various Conjunctival Micro-organisms to Monthly Incidence of Ulceration of Cornea	15
VIII.—New Patients treated according to the age at which they sought Treatment	16
IX.—Average Temperature	16
X.—Temperature and Number of New Patients treated	}
XI.—Temperature and Positive Examination	facing page
XII.—Temperature and Gonococcus	16
XIII.—Temperature and Koch-Weeks	
XIV.—Temperature and Morax-Axenfeld	
XV.—Blindness among Out-patients since 1909	17
XVI.—Total Percentage of Blindness in One or Both Eyes	17
XVII.—Pathological Report	18
XVIII.—Wassermann Tests	18
XIX.—Work done at all Ophthalmic Hospitals during 1921	19
XX.—List of Diseases	20
XXI.—List of Operations	23
XXII.—Actual Expenditure, Central Administration, 1920-1921	24
XXIII.—Actual Expenditure, Government Ophthalmic Hospitals, 1920-1921	24
XXIV.—Actual Expenditure, Government Ophthalmic Hospitals, per Unit, 1920-1921	25
XXV.—Actual Expenditure, Provincial Council Ophthalmic Hospitals, 1920-1921	26
XXVI.—Comparison of the Cost of Maintenance of a Permanent Ophthalmic Hospital in 1914 and 1921	27
XXVII.—Cost of Uniform Diets for all In-patients at Ophthalmic Hospitals during 1921, excluding Cost of Rations for Employees	28
XXVIII.—Number of Beds at the Ophthalmic Hospitals	28
X.—PUBLICATIONS	29

REPORT ON THE OPHTHALMIC SECTION, 1921.

FOREWORD.

The Ophthalmic Hospitals of Egypt have some claim to distinction in the fact that twenty special ophthalmic hospitals are grouped together under one direction. This not only enables a large amount of clinical work to be done (113,000 new patients were treated, 65,000 operations were performed, and over a million attendances of out-patients were recorded during last year), but also facilitates the systematic trial of various methods of operation or of treatment.

The travelling hospitals are five in number; three of these are large and completely equipped hospitals in which every sort of ophthalmic operation can be performed, and two are smaller though useful units.

There are fifteen specially built ophthalmic hospitals in the fourteen provinces of Egypt. These have been provided by local effort and are maintained mostly by the Government, but some by Provincial Councils. Also hospitals are in the course of construction at Qena and Gîza.

The surgical staff of the hospitals is entirely Egyptian, with a British Director.

During 1921 more than 15,000 patients applied for treatment at the hospitals who were blind in one or both eyes, or about twelve per cent of the total number of patients examined. The months of the year during which the pressure on the hospitals is greatest are from June to October. It is probable that this depends on the increased temperature during these months. The exact role, if any, played by flies in the propagation of eye-disease is not exactly known, but is under investigation.

There is a great distinction between acute ophthalmias and the chronic disease trachoma. The acute ophthalmias may, without treatment, cause blindness in a few days, and are the cause of the great increase of patients at the hospitals during the hot weather. The chronic trachoma affects more than 95 per cent of the population; it results very frequently in depreciation of vision, though less often in blindness.

The ophthalmic inspection and treatment of the pupils in the Government schools is an important feature of the work of the Ophthalmic Section. The report on this subject cannot be included here as the year's work is not yet completed.

RAPPORT ANNUEL DE LA SECTION OPHTALMOLOGIQUE, 1921.

AVANT-PROPOS.

Les Hôpitaux Ophtalmologiques d'Egypte ont quelque droit à la considération par ce fait que vingt hôpitaux ophtalmologiques spéciaux se trouvent groupés sous une direction unique.

Ceci non seulement permet la réalisation d'un travail clinique considérable (durant l'année passée 113,000 nouveaux malades y furent traités, 65,000 opérations exécutées, et plus d'un million de présences de malades externes enregistrées), mais, encore, facilite le triage systématique des diverses méthodes d'opération ou de traitement.

Les hôpitaux ambulants sont au nombre de cinq : trois sont vastes, dotés d'un matériel complet, aussi peut-on y faire toutes sortes d'opérations ophtalmologiques ; les deux autres, quoique moins considérables, représentent cependant des unités utiles.

Dans les quatorze provinces d'Egypte, il existe quinze hôpitaux spécialement construits comme hôpitaux ophtalmologiques, et qui sont dus aux efforts locaux ; leur entretien incombe au Gouvernement en majeure partie, les Conseils Provinciaux s'occupant de quelques-uns de ces hôpitaux. D'autres hôpitaux sont également en cours de construction à Keneh et Guizeh.

Le personnel chirurgical des hôpitaux est entièrement composé d'Egyptiens sous la direction d'un Anglais.

En 1921, il se présenta aux hôpitaux plus de 15,000 malades borgnes ou complètement aveugles, soit 12 pour cent du nombre total des malades examinés. Les hôpitaux sont surtout surchargés durant la période qui part de Juin à Octobre. Il est probable que cela est dû à l'élévation de température que l'on peut constater pendant ces mois. Le rôle précis, s'il en est un, que jouent les mouches quant à la propagation des maux d'yeux, n'est pas exactement connu, mais des recherches sont dirigées dans ce sens.

Une grande distinction doit être faite entre l'ophtalmie aiguë et le trachome chronique : la première peut, à défaut de traitement, provoquer la cécité en peu de jours ; c'est elle qui cause également l'accroissement considérable du nombre des malades qui se présentent aux hôpitaux durant la saison chaude. Le trachome chronique, d'autre part, qui affecte plus de 95 pour cent de la population, se traduit généralement par l'affaiblissement de la vue et moins souvent par la cécité.

L'inspection et le traitement ophtalmologiques des élèves des écoles gouvernementales est un aspect important du travail de la Section Ophtalmologique. Le rapport relatif à ce sujet ne pourra être inséré ici, le travail annuel n'ayant pas encore été terminé.

I.—OPHTHALMIC PROGRESS IN EGYPT.

During the past year the building of the new ophtalmic hospital at Qena has commenced; it is expected to be completed during the present year. In Gîza Province the Mudîr, Hassan Mazloum Bey, has at the request of His Majesty King Fuad, obtained a sufficient sum to justify the commencement of a permanent hospital for the province. An excellent site has been obtained from the Ministry of Finance, on which, as well as the hospital, it is proposed to erect an ophthalmic laboratory. This is much needed as the present laboratory is housed in a hired building. The money for the construction of the laboratory has been offered by the London Committee of the Imperial War Graves Commission, as a memorial to the men of the Egyptian Labour Corps and the Egyptian Camel Transport Corps who fell during the Great War. The sum available is L.E. 6,600, with which it is expected that a satisfactory building can be erected.

The southern section of Egypt has its ophthalmic needs supplied by a travelling hospital, which works from Luxor to Aswân, visiting Luxor, Isna, Idfu, Kôm Ombo, and Aswân.

This arrangement must suffice until a permanent hospital can be built at Aswân town, where a site already has been granted by the Ministry of Finance. The sum required for building and equipping a permanent hospital is about L.E. 13,000.

Now that the Government maintains an ophthalmic hospital in each of the fourteen provinces of Egypt it is probable that no further ophthalmic expenditure on provincial ophthalmic hospitals will be considered by the Government, and that local bodies, whether Provincial Councils or Municipalities, must provide the money for building, equipping and maintaining such other new hospitals as they may desire. Such expenditure by local bodies will be welcomed by the Department of Public Health, which is able and willing to assist in the inauguration as well as, if required, in the management of such hospitals.

The prime cost and the cost of maintenance of various types of hospitals is here given for general information. It should be noted that the main work is carried out among outpatients, and that the number of beds is not a measure of the activity of a hospital.

DESCRIPTION OF HOSPITAL.	Number of Beds.	Prime Cost at Present Prices.		Annual Maintenance.
		L.E.	L.E.	
A. Qena Hospital, now under construction	24	13,000		2,500
B. Faiyûm Hospital	12	6,000		2,000
C. Government Travelling Hospital...	12	3,000		3,000
D. Daqahliya Provincial Council Travelling Hospital... ...	8	1,500		1,500
E. Asyût Provincial Council Travelling Hospital... ...	—	750		750

II.—ULCERATION OF THE CORNEA COMPLICATING CONJUNCTIVAL INFECTION.

In the Annual Report for 1919 it was shown that under the form of treatment adopted at the Egyptian Ophthalmic Hospitals ulceration of the cornea is infrequent if the patient comes for treatment sufficiently early. During last year only 0·2 per cent of patients, who placed themselves under treatment while the cornea was still intact, developed ulceration. The treatment in all cases is the application of silver nitrate solution 2 per cent once, or more rarely twice a day, while the conjunctival sac is flushed very frequently with ordinary eusol solution, as used in general surgery; this is what is called constant wash treatment.

Out of 14,540 cases of acute conjunctivitis treated during last year 25 per cent came to the hospital with ulceration of the cornea already developed. Of the bacteriological causes of conjunctivitis the pneumococcus appears to be the most dangerous, then the gonococcus,

then the Morax-Axenfeld bacillus, and last the Koch-Weeks organism. This is the same relative order as was found both in 1919 and 1920.

ULCERS COMPLICATING CONJUNCTIVAL INFECTION DURING 1921.

ORGANISM.	No Ulceration.	ULCERATION OCCURRING IN		Total.	Per Cent of Cases in which Ulceration occurred.
		New Patients.	Patients under Treatment.		
Gonococcus	5,718	2,142	15	7,875	27·39
Koch-Weeks	3,297	784	7	4,088	19·34
Pneumococcus	137	143	1	281	51·24
Morax-Axenfeld	950	304	—	1,254	24·24
Mixed infection	720	320	2	1,042	30·90
TOTAL...	10,822	3,693	25	14,540	25·57

III.—CLINICAL CONDITIONS OF SPECIAL INTEREST.

1. OPTIC ATROPHY.

For many years we have noted that there were a large number of cases of optic atrophy, but it is only during the last few years that a classification has been adopted which enables the origin of the condition to be understood.

We divide the causes of optic atrophy into : (1) primary as in spinal disease and arteriosclerosis, (2) the result of retro-bulbar neuritis, (3) post-neuritic atrophy, (4) the result of disease of the retina and choroid, (5) after compression or injury of the nerve, (6) unknown causes.

Among the interesting cases reported during 1921 were 114 cases of optic atrophy. By far the larger number of these were of the post-neuritic type, 46 in all. Primary atrophy was met with nineteen times, in sixteen of which the cause was stated to be unknown: in one case the patient had disseminated sclerosis, in another chronic myelitis, in a third spastic paraplegia.

Retro-bulbar neuritis was met with in twenty-four cases, twenty-three of which were patients who had recently suffered from an acute infectious disease, generally typhus. Eleven cases were secondary to various forms of retinal disease, three were the result of compression or injury of the optic nerve. Finally all cases were not sufficiently defined in their appearance to enable an accurate diagnosis to be made, but approximated in type to the primary form of atrophy. During the present year the increased interest in this condition will lead, it is hoped, to the reduction of the unknown forms in our statistics by increased pertinacity in obtaining the patient's history, and in the examination of his general condition.

Optic Atrophy :—

(1) Primary :—

(a) Spinal disease :—

Disseminated sclerosis	...	...	...	...	...	...	...	...	...	1
Chronic myelitis	...	...	...	...	...	...	...	...	...	1
Spastic paraplegia	...	...	...	...	...	...	...	...	...	1

(b) Unknown	16
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	----

(2) Retro-bulbar neuritis :—

(a) Local	1
-----------	-----	-----	-----	-----	-----	-----	-----	-----	-----	---

(b) General :—

Infectious diseases	23
---------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	----

(3) Post-neuritic	46
-------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	----

(4) Retinitis, secondary	11
--------------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	----

(5) Compression or injury of nerve	3
------------------------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	---

(6) Unknown	11
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	----

2. OPTIC NEURITIS.

The number of cases of optic neuritis seen was twenty, of which seven were accompanying disease of the kidney, one was a complication of diabetes, five were syphilitic in origin, two occurred after acute fevers, and five were of unknown origin.

3. DISLOCATION OF LENS.

There were twenty-nine cases of dislocation of the lens, twenty of which traumatic in origin, mainly the result of assault. Two cases only were the result of couching operations by charlatans : there is a great reduction in the number of the couching operations, of which fourteen were reported in 1912, and twenty in 1918. In 1918 there were seventy traumatic dislocations of the lens reported and seventy also in 1920, so we have been more peaceful during the last year.

4. FUNDUS CONDITIONS.

There were forty-three cases of detachment of the retina. In sixty-three cases the choroid and retina were found to be diseased in various ways. There was one case of embolism of the central artery of retina. There were five cases of opaque nerve fibres, and one case of synchisis scintillans.

IV.—BLINDNESS IN EGYPT.

1. PERCENTAGE OF BLINDNESS AMONG HOSPITAL PATIENTS.

Of the 127,223 patients who applied for treatment during 1921 at the Egyptian Ophthalmic Hospitals 15,619 were found to be blind in one or both eyes. This works out at 12·2 per cent of the patients. It must not be thought, however, that the same percentage of the population as a whole is similarly affected. According to the 1917 Census the percentage was only 4·358. This was an improvement on the 1907 Census in which the percentage of people who were blind in one or both eyes was found to be 4·575.

Since the year 1909, when our statistics began to be accurate, the percentage of hospital patients who were blind in one or both eyes varied from 15·6 per cent in 1909 to 19·2 per cent in 1911, after which year there was a steady drop until 1917, when it rose again to nearly 14 per cent, increasing again in 1918 to 14·6 and in 1919 to 15·3 per cent. In these latter years it is to be noted that the food conditions were very bad throughout the country and especially in Upper Egypt, where large numbers were on the verge of starvation ; it is probable that the resulting loss of resisting powers was a contributory cause to the increase in the blindness in 1917, 1918, and 1919. In 1920 the percentage fell to 13·8 and to 12·2 in 1921.

I am making enquiries as regards the economic condition of the country in 1910 and 1911 to determine if this can account for the large proportion of blindness among our hospital patients in those years.

YEAR.	Per Cent of Blindness in One or Both Eyes.	YEAR.	Per Cent of Blindness in One or Both Eyes.
1909	15·6	1916	11·2
1910	17·4	1917	13·9
1911	19·2	1918	14·6
1912	15·8	1919	15·3
1913	14·8	1920	13·8
1914	13·2	1921	12·2
1915	12·0		

It is important to record our definition of blindness; we call a patient blind if he cannot count fingers held up in front of him at a distance of one metre, the definition adopted by Troussseau.

2. INCIDENCE OF BLINDNESS AT DIFFERENT LOCALITIES.

There was a varying incidence of blindness at different localities; at Aswân 20·26 per cent was recorded by Dr. Bakly. At Minya Dr. Mahmud Zaki reported 19·85 per cent. The next was at Mansûra where Dr. Seddik reported 19·3 per cent. Dr. Migally reported 17 per cent from Beni Suef, Dr. A. M. Girgis 16·5 per cent from Asyût, and Dr. Hassan Barrada 16·16 from Sohâg.

Except that the highest incidence of blindness was found at Aswân there is no special part of Egypt which is more particularly affected than any other as far as I can determine. However, it appears that Port Said and Alexandria have less blindness than the provincial capitals.

3. AGE AT WHICH BLINDNESS OCCURS.

The age at which people become blind has been studied in its relation with the grand total of cases examined, with the total number of blind patients, and with the other patients of the same age, all during 1921. It is only in relation with the number of patients of the same age that somewhat remarkable results have been obtained, as is seen from the following table:—

	Per Cent of Patients of this Age.
Under one year	4·68
From 1 to 5 years	6·73
,, 6 to 10 years	5·99
,, 11 to 15 „	7·37
,, 16 to 20 „	9·59
,, 21 to 25 „	10·65
,, 26 to 30 „	14·61
,, 31 to 35 „	16·19
,, 36 to 40 „	18·15
,, 41 to 45 „	23·15
,, 46 to 50 „	27·24
,, 51 to 55 „	30·11
,, 56 to 60 „	30·64
,, 61 to 65 „	34·15
,, 66 to 70 „	36·12
Over 70 years	40·34

These results may be summarized as follows: Of all the new patients who came to the hospitals who were under one year of age, 4·68 were blind in one or both eyes. Of all the patients who came to the hospitals aged between one year and five years, 6·73 per cent were blind in one or both eyes. The percentages worked out for the various five yearly periods of age similarly, give increasing figures from about 6 per cent from one to five years to about 40 per cent over 70 years of age.

This means either that the risk of the supervention of blindness goes on increasing throughout life, or that as age increases there is an increasing unwillingness to seek treatment at the hospitals unless blindness has supervened; or that there is less necessity as age advances to apply for hospital treatment.

The latter is the probable explanation, as we know from experience in the schools that trachoma is largely an age disease, and if this is accepted, it is clear that as age advances there is less necessity for treatment for this disease. I may quote from the last Annual Report of the Ophthalmic Hospitals (1920):—

“I have previously pointed out that trachoma appears to be closely related to the age of the pupils, the more serious stages being common in the first school year and less common in the fourth year. This is the result of the gradual process of cicatrization which

the life-history of the disease manifests. These serious stages diminish from approximately 33 per cent in the first year, 15 per cent in the second year, 11 per cent in the third year to 8 per cent in the fourth year. These details for the past four sessions in which treatment has been carried out are here given."

COMPARISON OF SERIOUS STAGES OF TRACHOMA, STAGES I AND II.

CLASS.	Per Cent.			
	1916-1917	1917-1918	1919-1920	1920-1921
First year	45·5	41·7	31·2	33·3
Second „ „ „ „	28·1	15·3	14·8	15·7
Third „ „ „ „	12·1	9·8	8·5	10·9
Fourth „ „ „ „	6·7	2·3	7·6	7·8

4. PATHOLOGICAL CAUSES OF BLINDNESS.

The pathological causes of blindness were 18,198 in number. Of these, conjunctivitis was responsible for the great majority, that is to say conjunctivitis which resulted in total corneal opacity, shrunken globe, secondary glaucoma, etc. These accounted for 13,792 of the causes. Glaucoma was responsible for 1,705 causes, cataract for 1,499, endogenous iritis for 236, optic atrophy for 163, and injury for 123.

A.—Congenital	17
B.—Acquired :—	
(1) Conjunctivitis resulting in :—	
(a) Total corneal opacity	5,033
(b) Shrunken globe...	4,390
(c) Secondary glaucoma...	2,711
(d) Other conditions	1,658
(2) Fundus :—	
(a) Optic atrophy	163
(b) Retinitis Pigmentosa	17
(c) Detachment of retina	51
(d) Various	160
(3) Glaucoma, primary :—	
Absolute monocular	930
Absolute binocular	775
(4) Cataract	1,499
(5) Injury	123
(6) Operation	30
(7) Infectious disease	7
(8) Iritis endogenous	236
(9) Various	398
Total ...	18,198

V.—THE INCIDENCE OF PRIMARY GLAUCOMA IN EGYPT.

During 1921 the number of patients exhibiting signs of glaucoma was 2,254 out of a total of 127,223 persons presenting themselves for treatment at the Egyptian Ophthalmic Hospitals. This works out at 1·77 per cent, a considerably higher percentage of glaucoma, as compared with other eye-diseases, than is given in the American Encyclopedia of

Ophthalmology which is one per cent. This high incidence of glaucoma among Egyptians was first observed by Brugsch Bey, though it could hardly escape the notice of any ophthalmologist practising in Egypt.

It is much to be regretted that so many patients delay seeking treatment until they are already blind in one or both eyes, as was the case with 75 per cent of our cases.

The operation of election in uncomplicated chronic glaucoma has been trephining the corneo-sclera according to the method of Elliot, in which an iridectomy is invariably done through the trephine hole. The instrument used is always a $1\frac{1}{2}$ -millimetre Bronner's trephine.

In acute glaucoma and in most cases of sub-acute glaucoma the operation advised is an iridectomy carried out through an incision effected with a Graefe knife, the iris being incised with the scissors at either extremity of the wound which should be fairly peripheral. A very large incision is not required, provided that the iris forceps seize the iris at the right hand side of the wound well within the A.C., and tearing it away from the periphery, cut it again at the left hand extremity of the wound while it is put on the stretch by traction with the forceps.

Trephining is not advisable in cases in which there is opacity of the lens, on account of causing difficulty when the time comes to do an extraction. Nor is trephining advisable in cases which have a thin conjunctiva with very little subconjunctival tissue; nor in cases where the use of eserin previous to the operation has caused some œdema of the conjunctiva. It is a matter of experience that Europeans incline to have a thinner conjunctiva than Egyptians. Also Egyptian gentlefolk, especially those of spare habit, have a thinner membrane than do fellahîn.

During the year 337 iridectomy operations were performed and 492 trephinings with iridectomy.

We advise operation in both eyes in all cases of glaucoma, that is to say, when unmistakable glaucoma has been determined to be present in one eye, we advise operation also in the fellow, even though there are as yet no clinical signs of glaucoma in the better eye. This has been our practice for many years; it was referred to in the Annual Report of the Ophthalmic Hospitals for 1913.

INCIDENCE OF PRIMARY GLAUCOMA.

	1916	1917	1918	1919	1920	1921	TOTAL.
Acute	19	12	12	49	328	56	476
Sub-acute	15	38	45	49	158	79	384
Chronic	436	552	637	1,617	1,739	2,119	7,100
Absolute	1,113	1,842	1,518	1,000	—	—	5,473
TOTAL... ...	1,583	2,444	2,212	2,715	2,225*	2,254†	13,433
Total number of patients examined	94,447	100,410	90,668	83,577	108,113	127,223	604,438
Per cent of glaucoma cases	1·67	2·43	2·44	3·25	2·05	1·77	2·22
Per cent of absolute glaucoma cases	1·17	1·83	1·67	1·19	1·45	1·34	1·44
Operations :—							
Iridectomy...	78	153	203	299	310	337	1,380
Trephining with iridectomy ...	534	655	509	450	425	492	3,065

* Including 1,565 absolute monocular and binocular.

† Including 1,705 absolute monocular and binocular.

VI.—PATHOLOGICAL REPORT.

THE EYELIDS.

Among the benign tumours of the lids were 12 dermoid cysts, 1 adenoma of a Meibomian gland, 1 angio-fibroma in a child of fifteen months of age, and a fungating Meibomian gland. The malignant tumours of the lid included eight cases of rodent ulcer, of which four came from Asyût Province. There were also from Asyût a fibro-angioma and a glandular carcinoma. Two cases of epithelioma were found.

THE CONJUNCTIVA.

The conjunctival specimens exhibited hyaline degeneration three times, and amyloid degeneration or the precursor of amyloid degeneration, eleven times. There were 4 angioma of various kinds, 1 lymphangiectasis, 1 granuloma, and 1 fibroma. The malignant tumours were only two in number, being an epithelioma and a glandular carcinoma.

THE LIMBUS.

The tumours of the limbus were less frequent than they were in 1920, there having been only two benign tumours, a granuloma and a lepra nodule. There were also three cases of epithelioma.

THE CORNEA.

The cornea supplied two granulomata.

THE RETINA.

The retina was twice found to be affected with glioma.

THE ORBIT.

The orbit was once eviscerated for myxo-sarcoma.

MISCELLANEOUS CASES.

There were 28 cases of inflammation of the iris : 145 cases of anterior synechiæ or adherent leucomata resulting in secondary glaucoma : and 29 cases of phthisis bulbi.

The examination of the conjunctival secretion for eosinophilia was carried out 26 times with a positive result in 5 cases. The Veterinary Department of the Ministry of Agriculture at Gîza sent the eyes of 35 horses, mules or donkeys for examination, 7 of which were found to show signs of disease.

VII.—RESULT OF EXAMINATION AT THE CENTRAL MEDICAL COMMISSION OF VISUAL ACUITY AMONG CANDIDATES FOR POSTS IN THE GOVERNMENT SERVICE.

The regulations which at present regulate the admission of candidates to the Government service as far as the eye-sight is concerned are as follows : Vision should not be less than 6/12 with each eye. If the vision is 6/6 with one eye, vision of 6/18 with the other eye is accepted. Glasses may be used of a strength not greater than 6 dioptres for each eye. If the glasses are stronger than six dioptres, the candidate will be rejected, unless his physical condition, apart from visual acuity, is above the average.

During the year 1921, 5,441 individuals were examined, of whom 1,587 failed to attain the requisite visual standard. Of those who failed 779 were not wearing spectacles, while 808 were wearing these aids to vision.

During the same year also 445 candidates attained the requisite standard who had previously failed on one or more occasions. Of these only 13 were not wearing spectacles.

Therefore, 29 per cent failed to attain the very low standard demanded. It is interesting to recall that in the Report for 1920 it was shown that in the Primary Schools of the Ministry of Education in the provinces, 36 per cent of the pupils did not attain to such a standard of vision as would admit them to Government service.

VIII.—THE OPHTHALMOLOGICAL SOCIETY OF EGYPT.

The Ophthalmological Society of Egypt held its annual meeting at the School of Medicine on March 3, 1922. The programme was as follows :—

- (1) A. Migally : "A case of perforation of the Cornea by a piece of egg-shell."
- (2) A. F. MacCallan : "Causes of blindness in Egypt."
- (3) A. F. Rasheed Bey : "A summer visit to the Vienna and Berlin Ophthalmic Clinics in 1921."
- (4) M. Sobhy Bey : "Four cases of pseudo-membranous conjunctivitis of a severe nature, and threatening affection of the cornea treated with anti-diphtheritic serum."
- (5) Mohamed Tewfik : "Some notes about milk injections: with reference to tolerance of high doses among Egyptian patients comparatively low reaction: its theory of action: and some clinical results."
- (6) Zaki Seddik : "A case of two small foreign bodies in the globe removed successfully."
- (7) R. V. Dolbey : "Ethmoidal sinus suppuration simulating orbital tumour."
- (8) M. Sobhy Bey : "A cyst of the orbit with proptosis. Patient had a Kronleins operation. A microfilaria was found in the cheesy contents of the cyst. Blood examination shows microfilariasis. The negative result of a systematic laboratory research to the contents, except the presence of the microfilaria already mentioned, makes the filarial nature of the cyst quite possible. The patient will be shown to the Society."
- (9) M. Riad : "Fundus appearance in Ankylostoma worm infection."
- (10) A. F. MacCallan : "Synopsis of the clinical work at the Egyptian Ophthalmic Hospitals in 1921."
- (11) M. Sobhy Bey : "A case of Parinaud's conjunctivitis with negative result of animal inoculation."
- (12) M. Riad : "Report on a case of multiple lymphangioma of scalp, face, and lids."
- (13) A. F. MacCallan : "Incidence of primary glaucoma in 1921 in Egypt."
- (14) Mahmud Kamel : "Treatment of purulent ophthalmia."
- (15) W. Kiep : "Ocular complications in malaria."
- (16) M. Sobhy Bey : "An adenoma of the Meibomian gland of the lower lid simulating in clinical appearance an epithelioma."
- (17) Mohamed Tewfik : "Report on the result of treatment of case of arterio-venous aneurysm reported to the Society last year."
- (18) M. Sobhy Bey : "A probable case of sporotrichosis of the lids lymphangitic form. A fungus obtained from the lymphangitic nodules on artificial media. Slides showing the mycelium in the smear and cultures."
- (19) A. M. Girgis : "Exhibition of a case of iridotomy for glaucoma."
- (20) Fakhry Hanna : "Exhibition of :—
 - (a) "A case of tumour of L. Orbit."
 - (b) "A case of R. congenital ptosis."
- (21) Halim Abu Seif : "Exhibition of a case of sarcoma of orbit of 7 years' duration in a patient 10 years' old."
- (22) W. Kiep : "Exhibition of a case of scrofula with phlyctenular keratitis."
- (23) M. Zaki : "Exhibition of a case of scrofula and phlyctenular keratoconjunctivitis."

IX.—STATISTICAL TABLES.

TABLE I.—SYNOPSIS OF WORK OF HOSPITALS SINCE 1911.

Hospitals in existence :—											
	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Travelling	3	4	5	4	—	4	4	5	5	5	5
Permanent	2	4	7	10	11	13	13	13	15	15	16
New patients treated	20,488	28,029	40,670	50,126	52,752	68,304	81,529	82,316	76,525	94,921	113,201
Total attendances of out-patients	236,411	341,211	544,267	686,012	735,919	849,366	903,751	922,614	906,961	1,064,509	1,322,074
Operations performed	14,322	21,315	30,648	40,710	42,146	54,205	59,581	54,277	49,974	56,503	65,378
In-patients	678	909	1,807	2,071	2,274	2,454	2,847	3,264	3,613	4,232	4,513
Details :—											
Patients examined	31,274	43,668	62,233	75,398	71,930	94,447	100,410	90,668	83,577	108,113	127,223
Patients regularly treated	20,488	28,029	40,670	50,126	52,752	68,304	81,529	82,316	76,525	94,921	113,201
Incurable cases	2,620	7,200	9,544	10,554	7,765	9,871	9,675	5,650	4,467	6,400	6,727
Blind in one eye	3,196	4,115	5,360	6,425	5,637	7,042	9,385	8,969	8,537	9,833	10,566
Blind in both eyes	2,824	3,878	3,591	2,992	3,504	4,611	4,261	4,278	5,154	5,053	
Trichiasis cases examined	7,871	13,176	17,329	21,624	19,220	22,214	27,341	26,164	20,052	23,154	28,245
, eyes operated on and cured	3,933	6,942	11,700	16,542	19,149	26,094	30,200	28,890	24,611	27,081	28,939

TABLE II.—SOURCES OF PROVISION OF HOSPITALS.

HOSPITALS.	Date at which opened.	Government Grant.	Public Subscription or Private Benefaction.	Provincial Councils or Municipality.
			L.E.	L.E.
No. 1 Travelling*	1904	—	1,000	—
No. 2 Camp†	1905	—	—	1,500
Tanta	1908	8,463	—	—
Asyût	1911	8,817 and site	5,004	—
Mansûra	1912	—	5,000	—
Beni Suef	1912	—	4,000	—
Asyût Travelling	1912	—	—	720
Zagazig	1913	—	—	4,286
Mahalla el Kubra...	1913	—	—	2,400
Kafr el Zaiyât	1913	—	—	2,200
Daqahliya Travelling	1913	—	—	720
Damanhûr	1914	—	—	5,000
Shibîn el Kôm	1914	—	5,422	—
Sohâg	1914	960	4,000	—
Minya	1915	—	—	5,500
Santa	1915	—	—	2,600
Faiyûm	1916	Site.	—	4,000
No. 3 Travelling‡	1918	—	1,000	—
Benha	1920	—	14,000	—
Port Said...	1921	1,000	—	1,000
Qena §	—	—	12,400	2,800
Giza §	—	Site.	6,300	600
TOTAL		19,240	58,126	33,326

* Retained in Cairo for provision of clinical facilities for teaching.

† Stationary at Giza until completion of Giza Permanent Ophthalmic Hospital.

‡ For South Egypt, Luxor to Aswân, until Aswân Permanent Hospital is completed.

§ Under construction.

TABLE III.—NEW PATIENTS TREATED PER MONTH.

January	6,651
February	6,284
March	7,359
April	9,066
May...	8,749
June	12,208
July	14,393
August	10,822
September	10,735
October	11,194
November	9,107
December	6,633
TOTAL	113,201

TABLE IV.—NUMBER OF PATIENTS TREATED AND OPERATIONS PERFORMED AT THE OPHTHALMIC HOSPITALS DURING 1921.

HOSPITALS.	NUMBER OF PATIENTS.	HOSPITALS.	NUMBER OF OPERATIONS
No. 1 Rôd el Farag	9,047	Tanta	5,749
Asyût	8,210	No. 1 Rôd el Farag	5,407
Tanta	7,955	Asyût	4,584
No. 2 Stationary Gîza	7,927	No. 2 Stationary Gîza	3,810
Beni Suef	6,054	Beni Suef	3,558
Alexandria	5,720	Benha	3,494
Minya	5,529	Sohâg	3,493
Port Said	5,315	Minya	3,491
Shibîn el Kôm	5,299	Mansûra	3,370
Benha	5,254	No. 3 Travelling	3,319
Asyût Travelling	5,160	Shibîn el Kôm	2,941
Mansûra	5,136	Zagazig	2,866
Zagazig	4,916	Faîyûm	2,683
Faîyûm	4,726	Alexandria	2,471
No. 3 Travelling	4,389	Daqahliya Travelling	2,295
Sohâg	4,142	Asyût Travelling	2,205
Damanhûr	4,000	Kafr el Zaiyât	2,192
Mahalla el Kubra	3,765	Damanhûr	1,914
Daqahliya Travelling	3,369	Mahalla el Kubra	1,888
Kafr el Zaiyât	3,211	Santa	1,880
Santa	2,998	Port Said	1,315
Aswân (Oph. Branch)	1,079	Aswân (Oph. Branch)	453

N.B.—Number of working months :—

No. 3 Travelling	11 $\frac{2}{3}$	(Opened on June 11, 1920.)
Port Said	6 $\frac{2}{3}$	(Opened at the general hosp. on Jan. 23, and closed
Aswân Branch	2 $\frac{3}{4}$	on April 1.)
Asyût Travelling	7 $\frac{1}{2}$	
Daqahliya Travelling	9 $\frac{2}{3}$	

TABLE V.—AVERAGE NUMBER OF OPERATIONS PERFORMED PER MONTH AT ALL OPHTHALMIC HOSPITALS DURING 1921.

HOSPITALS.	MAJOR.	HOSPITALS.	MINOR.
Asyût	233	Tanta	311
No. 1 Rôd el Farag	206	No. 1 Rôd el Farag	244
Sohâg	188	Asyût	149
Benha	188	Asyût Travelling	148
Beni Suef	184	No. 2 Stationary Gîza	139
No. 2 Stationary Gîza	178	No. 3 Travelling	135
Tanta	169	Minya	128
Faîyûm	169	Mansûra	124
Minya	163	Beni Suef	113
Zagazig	160	Shibîn el Kôm	109
Mansûra	157	Daqahliya Travelling	107
No. 3 Travelling	156	Benha	104
Asyût Travelling	146	Sohâg	103
Shibîn el Kôm	136	Aswân Branch	97
Daqahliya Travelling	131	Alexandria	96
Port Said	114	Kafr el Zaiyât	86
Alexandria	110	Port Said	83
Santa	103	Zagazig	79
Kafr el Zaiyât	96	Damanhûr	69
Damanhûr	91	Mahalla el Kubra	68
Mahalla el Kubra	90	Faîyûm	54
Aswân Branch	68	Santa	54

TABLE VI.—CONJUNCTIVAL MICRO-ORGANISMS FOUND DURING 1921.

TABLE VII.—RELATION OF VARIOUS CONJUNCTIVAL MICRO-ORGANISMS TO MONTHLY INCIDENCE OF ULCERATION OF CORNEA.

		GONOCOCCUS.		Koch-Weeks.		PNEUMOCOCCUS.		MORAX-AXENFELD.		MIXED INFECTION.	
No.	Ulceration occurring in	No.	Ulceration occurring in	No.	Ulceration occurring in	No.	Ulceration occurring in	No.	Ulceration occurring in	No.	Ulceration occurring in
Ulceration.	New Patients.	Ulceration.	New Patients.	Ulceration.	New Patients.	Ulceration.	New Patients.	Ulceration.	New Patients.	Ulceration.	New Patients.
January	68	37	89	31	6	8	50	22	24	25
February	40	11	72	20	2	6	57	14	16	19
March	74	28	101	23	4	4	55	14	22	12
April...	...	259	88	346	51	—	7	83	20	39	15
May	412	135	431	64	1	14	101	33	84	20
June	814	231	598	109	4	19	102	26	68	25
July	1,023	370	6	394	98	—	106	47	83	42
August	641	287	3	231	91	—	74	30	63	23
September	691	251	—	277	83	—	84	27	82	36
October	782	282	3	339	70	1	76	29	58	19
November	618	257	1	295	86	—	25	17	1	105
December	296	165	—	124	58	1	9	12	80	21
Total...	...	5,718	2,142	15	3,297	784	7	137	143	1	950
											720
											320
											2

TABLE VIII.—NEW PATIENTS TREATED ACCORDING TO THE AGE
AT WHICH THEY SOUGHT TREATMENT.

AGE.	Number of Patients.
Under one year	7,002
From one to 5 years	14,229
„ 6 to 10 years	13,164
„ 11 to 15 „	11,430
„ 16 to 20 „	8,652
„ 21 to 25 „	9,101
„ 26 to 30 „	10,708
„ 31 to 35 „	9,139
„ 36 to 40 „	7,991
„ 41 to 45 „	5,438
„ 46 to 50 „	5,006
„ 51 to 55 „	2,833
„ 56 to 60 „	3,358
„ 61 to 65 „	2,070
„ 66 to 70 „	1,603
Over 70 years	1,537
TOTAL	113,201

Little is to be learned from this table except that a large and increasing number of young patients are desirous of utilising the hospitals.

TABLE IX.—AVERAGE TEMPERATURE.

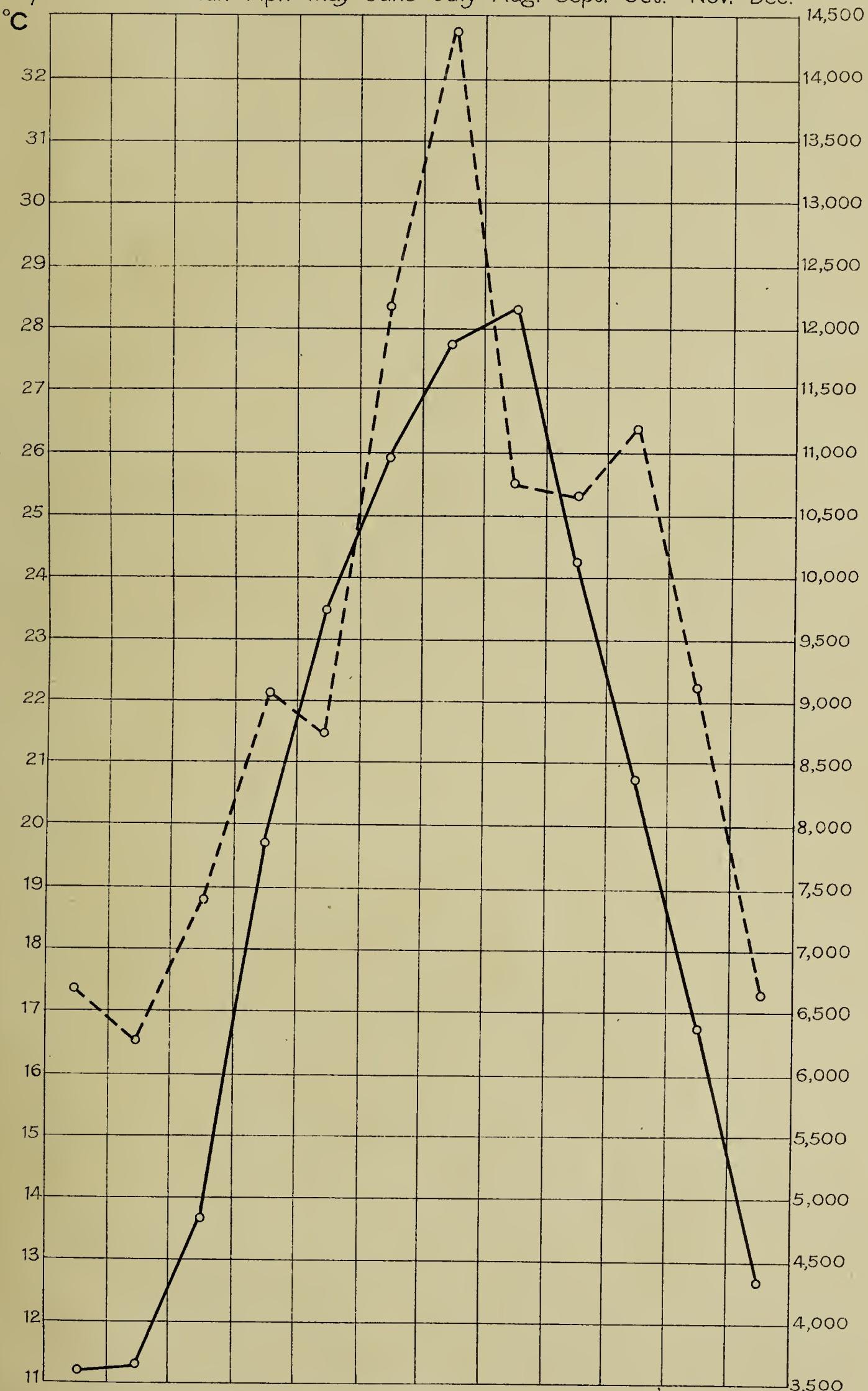
The average temperature was arrived at by taking one place in Lower Egypt (Qorashîya), one place in Cairo (Gîza), and one place in Upper Egypt (Asyût), and obtaining an average figure from the mean temperature at each place on each month. This is shown in appended table, the readings being in degrees centigrade.

MONTH.	QORASHÎYA.	GÎZA.	ASYÛT.	AVERAGE.
January	10·7	10·8	12·1	11·2
February	10·5	11·1	12·4	11·3
March	12·5	13·4	15·3	13·7
April	17·8	18·6	22·8	19·7
May	21·6	22·6	26·5	23·6
June	24·1	24·8	29·2	26·0
July	26·5	26·9	30·0	27·8
August	26·7	27·4	31·0	28·4
September	23·4	23·6	25·6	24·2
October	20·0	20·2	22·3	20·8
November	16·3	16·3	17·7	16·8
December	12·2	12·4	13·5	12·7

TABLE X.

TEMPERATURE AND NUMBER OF NEW PATIENTS TREATED

Temp. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. N^o of Cases



a. — Average temperature in degrees centigrade.

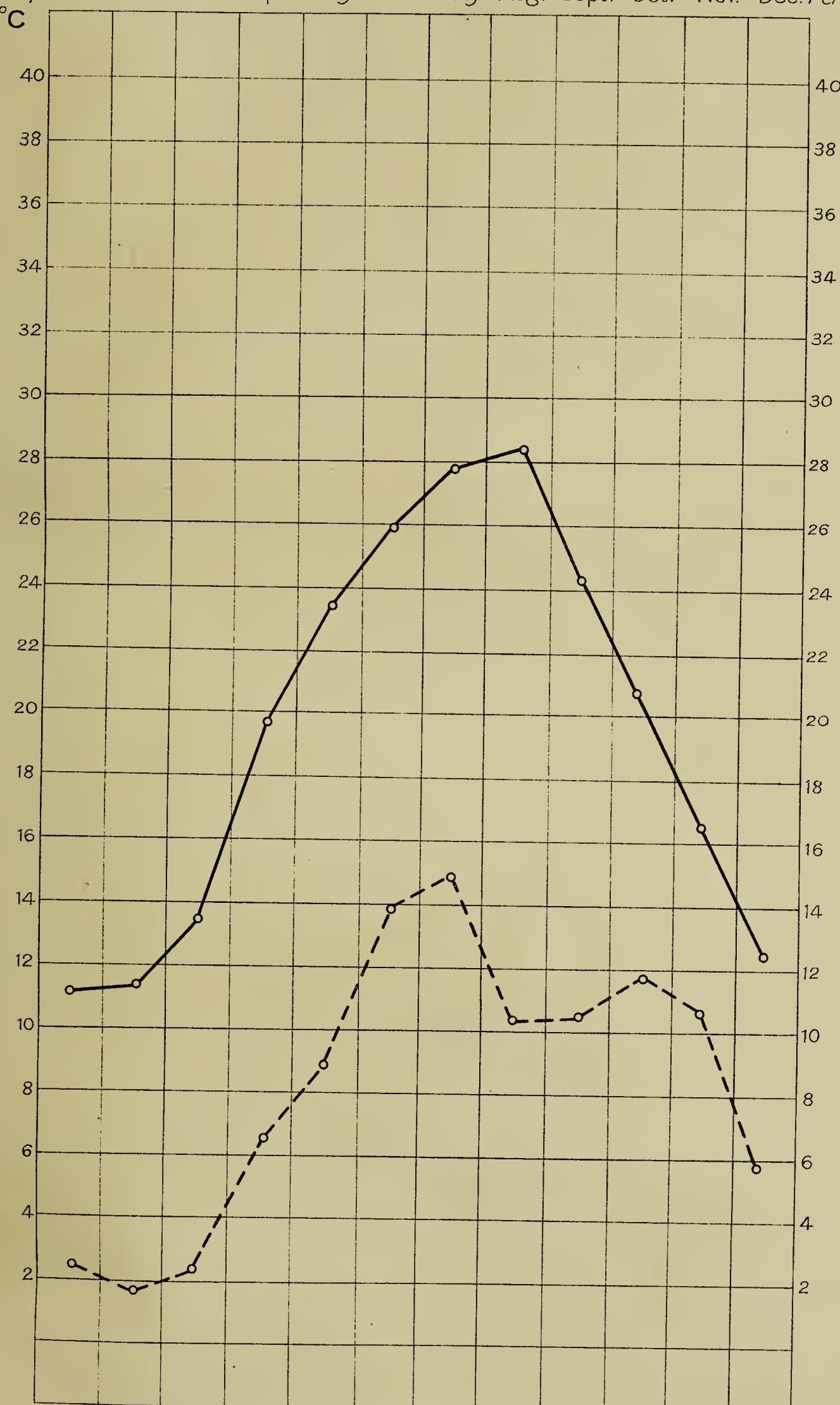
b. - - - New patients treated per month.

S.O.F.E. 22/356

TABLE XI

TEMPERATURE AND POSITIVE EXAMINATION

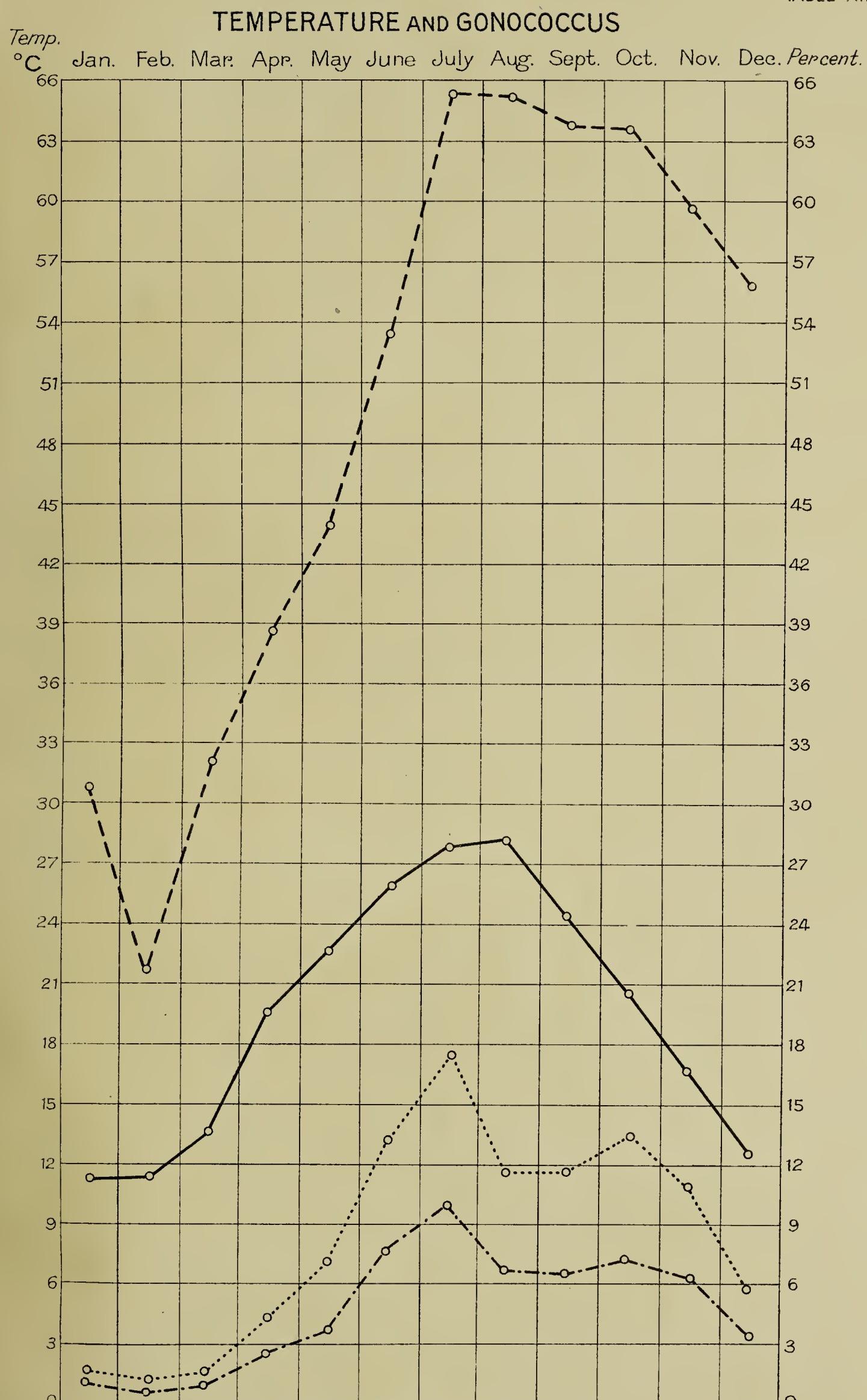
Temp. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Percent.



a. — Average temperature in degrees centigrade.

b. - - - Percentage monthly of positive examinations on total of all micro-organisms found
S.ofE.22/356 during the year.

TABLE XII



— Temperature in degrees centigrade.

- - - - - Percentage of Gonococcal findings on monthly total of all micro-organisms found during the year.

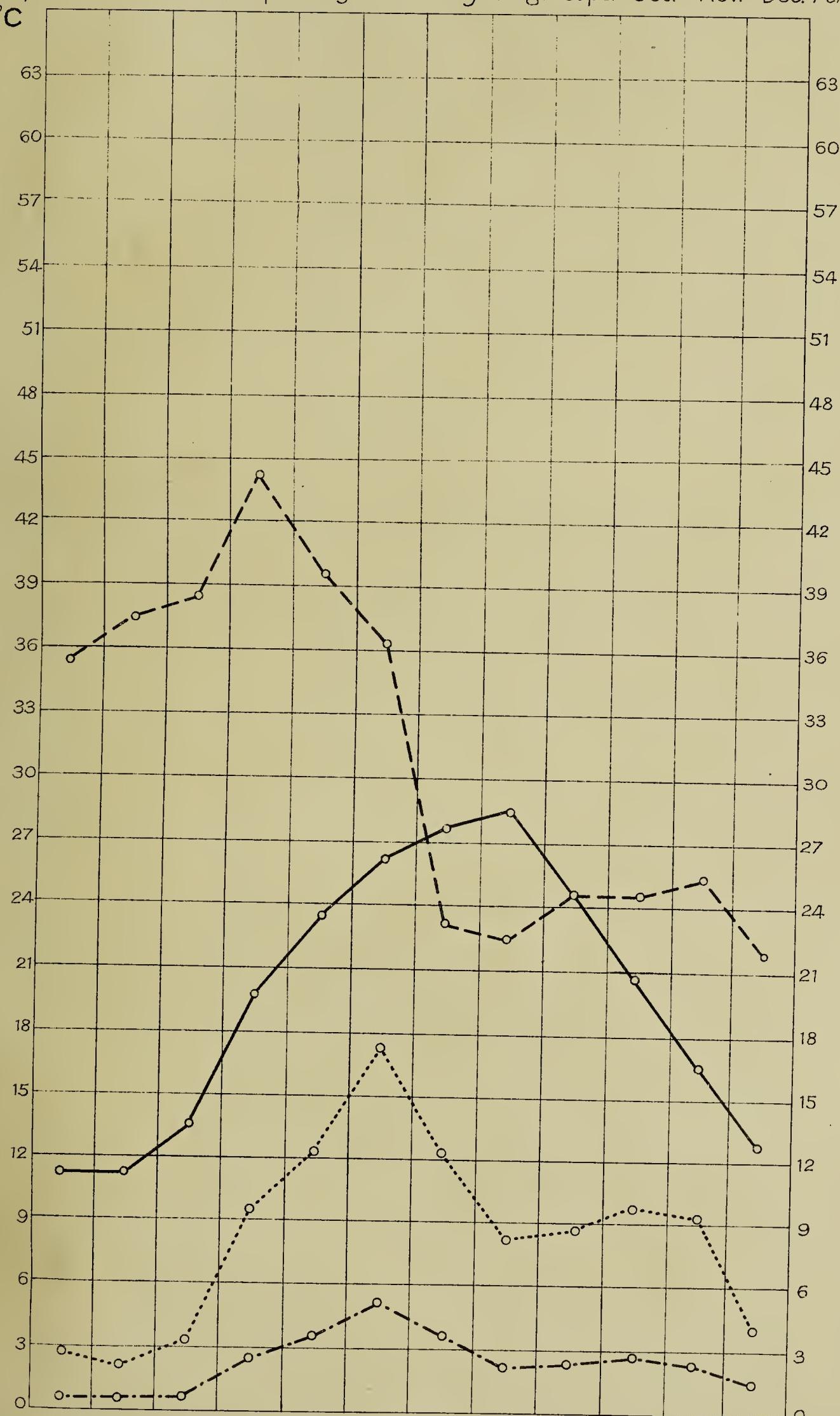
- - - - - Monthly percentage of Gonococcal findings on total of all micro-organisms found during the year.

..... Monthly percentage of Gonococcal findings on total of Gonococcal findings during the year.

TABLE XIII

TEMPERATURE AND KOCH-WEEKS

Temp. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Percent.



Average temperature in degrees centigrade.

Percentage of Koch-Weeks bacillus findings on monthly totals of micro-organisms.

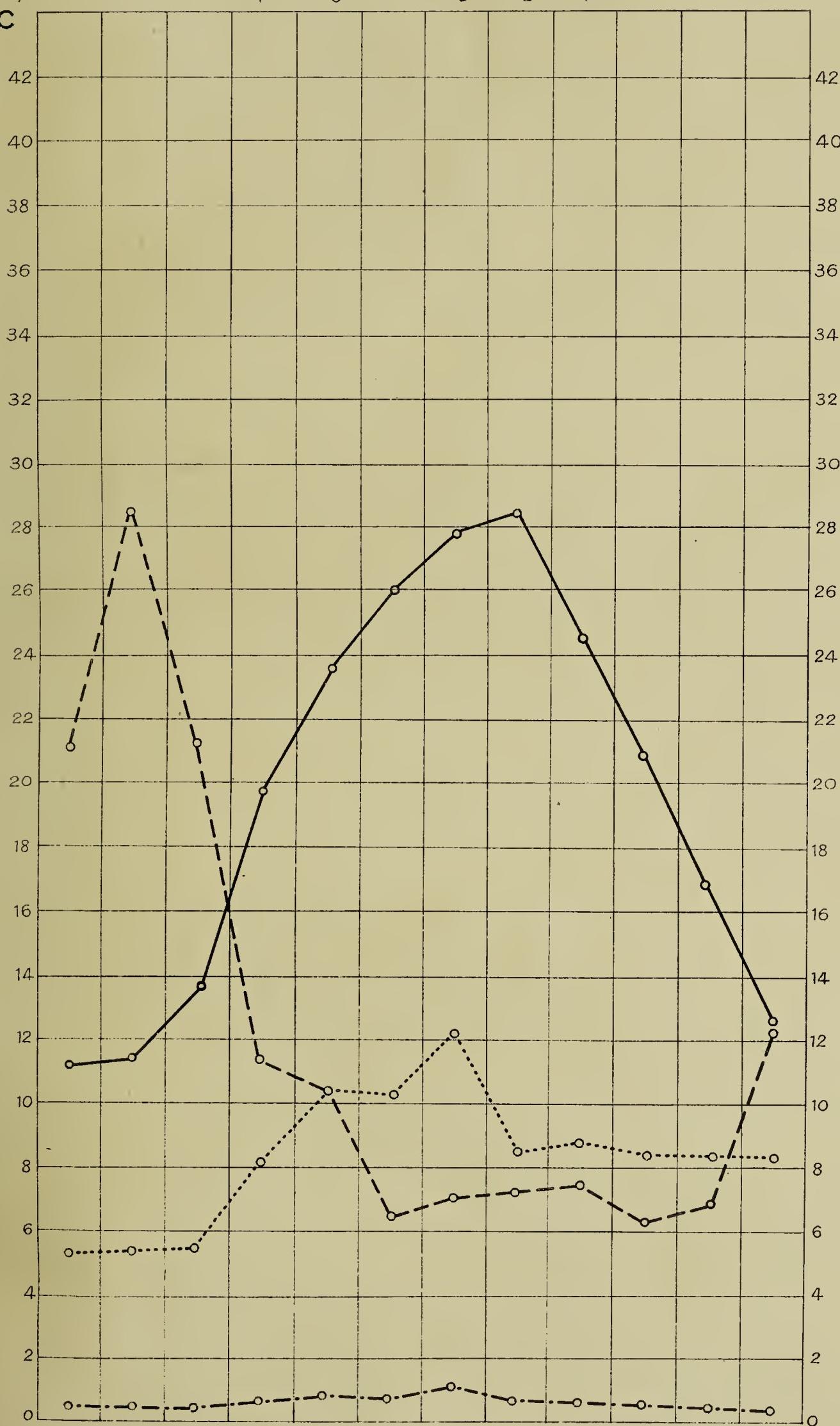
Percentage of Koch-Weeks bacillus findings on total of all micro-organisms found during the year.

Monthly percentage of Koch-Weeks bacillus on total of Koch-Weeks bacillus findings during the year.

TABLE XIV

TEMPERATURE AND MORAX-AXENFELD

Temp. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Percent



— Average temperature in degrees centigrade.

- - - Percentage of Morax-Axenfeld bacillus on monthly totals of micro-organisms found.

- - - - Percentage of Morax-Axenfeld bacillus on total of all micro-organisms found during the year.

S of E 22/356 Monthly percentage of Morax-Axenfeld bacillus on total of Morax-Axenfeld bacillus findings during the year.

TABLE XV.—BLINDNESS AMONG OUT-PATIENTS SINCE 1909.

YEAR.	TOTAL NUMBER OF PATIENTS EXAMINED.	ONE EYE.		BOTH EYES.		ONE EYE AND BOTH EYES.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
1909	22,373	2,116	9·4	1,385	6·1	3,501	15·6
1910	25,506	2,438	9·5	2,010	7·8	4,448	17·4
1911	31,274	3,196	10·2	2,811	8·9	6,007	19·2
1912	43,668	4,115	9·4	2,824	6·4	6,939	15·8
1913	62,233	5,360	8·6	3,878	6·2	9,238	14·8
1914	75,398	6,425	8·5	3,591	4·7	10,016	13·2
1915	71,930	5,637	7·8	2,992	4·2	8,629	12·0
1916	94,447	7,042	7·4	3,504	3·7	10,546	11·2
1917	100,410	9,385	9·3	4,611	4·6	13,996	13·9
1918	90,668	8,969	9·0	4,261	4·7	13,230	14·6
1919	83,577	8,537	10·2	4,278	5·1	12,815	15·3
1920	108,113	9,833	9·1	5,154	4·7	14,987	13·8
1921	127,223	10,566	8·3	5,053	3·9	15,619	12·2
TOTAL	936,820	83,619	8·9	46,352	4·9	129,971	13·8

TABLE XVI.—TOTAL PERCENTAGE OF BLINDNESS IN ONE OR BOTH EYES.

PERMANENT HOSPITALS :—	1916	1917	1918	1919	1920	1921
Tanta	5·3	9·2	8·8	12·05	7·82	9·78
Asyût	11·7	18·4	20·2	20·7	19·05	16·5
Mansûra	16·6	13·2	13·9	18·2	17·70	19·3
Beni Suef	13·2	16·0	16·9	18·9	16·40	17·07
Zagazig	9·3	15·0	15·9	19·6 *	17·76	11·1
Damanhûr	11·8	13·5	12·9	10·8	9·2	9·77
Shibîn el Kôm	11·8	10·2	12·3	8·2	6·3	9·09
Sohâg	14·3	14·03	14·7	13·9	16·3	16·16
Minya	20·7	30·7	20·6	20·6	19·8	19·85
Faiyûm	11·06	13·0	18·2	17·7	12·36	11·1
Benha	—	—	—	—	9·6	7·4
Alexandria	—	—	—	—	10·7	9·7
Aswân (Oph. Branch) ...	—	—	—	—	—	14·6
Port Said	—	—	—	—	—	6·13
Mahalla el Kubra	17·03	12·2	12·3	12·5	10·4	9·2
Kafr el Zaiyât	8·3	12·6	10·1	11·4	10·93	10·88
Santa	10·06	13·7	14·2	15·6	13·84	12·63
TRAVELLING HOSPITALS :—						
No. 1 Travelling :—						
Kafr el Dauwâr	12·7	11·9	—	—	—	—
Qena	—	20·5	18·3	—	—	—
Benha	—	10·7	—	—	—	—
Alexandria	—	—	15·0	—	—	—
Aswân	—	—	12·8	22·7	—	—
Edfû	—	—	—	—	24·16	—
Damietta	—	—	—	—	14·3	—
Rôd el Farag	—	—	—	—	16·86	14·35
No. 2 Stationary :—						
Gîza	10·5	12·6	11·1	8·4	14·73	13·09
Rosetta	—	15·7	—	—	—	—
Fuwa	—	12·6	—	—	—	—
Embaba	—	—	15·6	—	—	—
No. 3 Travelling :—						
Barrage	—	—	15·6	16·5	15·25	—
Port Said	—	—	—	—	11·12	—
Naga Hamâdi	—	—	—	—	9·42	4·1
Aswân	—	—	—	—	—	20·26
Asyût Travelling :—						
Manfalût	—	8·9	14·7	—	—	6·46
Dairût	—	6·4	12·3	—	14·22	—
Mallâwi	6·1	8·2	—	—	20·0	—
Abnûb	4·1	—	—	—	15·27	14·6
Abu Tig	—	9·6	—	17·9	—	9·8
Badâri	—	—	—	10·5	—	—
Daqahliya Travelling :—						
Mit Ghâmr	7·9	—	8·2	15·3	18·50	—
Matariya	—	—	—	15·2	—	8·95
Dikirmis	—	10·6	—	—	—	11·1
Fâriskûr	7·1	—	7·2	13·9	—	—
Aga	—	22·3	14·2	—	16·56	—
Simbillâwein	—	10·7	—	—	15·58	12·32

* Increased owing to E.L.C. patients.

TABLE XVII.—PATHOLOGICAL REPORT.

Tissues hardened, sections cut and examined microscopically at the Ophthalmic Laboratory during 1921.

LIDS :—						Brought forward	121	
Inflammation	2							
Tumours :—						ORBIT :—		
Benign, including cysts	16					Tumours :—		
Malignant	15					Malignant	1	
CONJUNCTIVA :—						LACRIMAL SAC :—		
Inflammation	8					Tumour	7	
Degeneration	14					Normal	4	
Tumours :—						LACRIMAL CANALICULUS :—		
Benign, including cysts	10					Tumour	1	
Malignant...	2					GLAUCOMA :—		
LIMBUS :—						Primary	2	
Tumours ;—						Secondary :—		
Benign, including cysts	2					Anterior synechia or adherent leu-		
Malignant	4					coma	145	
CORNEA :—						Luxation of lens	1	
Wounds	4					Inflammation (irido-cyclitis etc.) ...	7	
Inflammation, including ulceration ...	1					PANOPHTHALMITIS :—		
Tumours :—						Exogenous	2	
Benign...	1					Endogenous	3	
SCLEROTIC :—						SYMPATHETIC OPHTHALMIA ...	2	
Wounds	2					PHTHISIS BULBI :—		
Tumours :—						Cause undetermined	1	
Benign, including cysts	1					Inflammation	28	
IRIS AND CILIARY BODY :—						UNCLASSIFIED	2	
Wounds	6					UNDETERMINED	21	
Inflammation	28					EXAMINATION OF CELLS :—		
LENS :—						Eosinophilia :—		
Cataract	1					Positive	5	
CHOROID :—						Negative	18	
Inflammation	1					Undetermined	3	
Degeneration including ossification ...	1					OTHER ANIMALS :—		
RETINA :—						(Horses, mules, and donkeys).		
Tumours :—						Diseased	7	
Malignant	2					Normal	28	
					Carried forward	121	GRAND TOTAL	409

TABLE XVIII.—WASSERMANN TESTS.

Positive	25
Doubtful...	11
Negative...	32
Unfit	8
TOTAL	76

TABLE XIX.—WORK DONE AT ALL OPHTHALMIC HOSPITALS DURING 1921.

* Incurable cases do not receive tickets, but are recognized as soon as seen by the surgeon as both incurable and devoid of surgical interest.

[†] Incurable cases include those which are recognized as soon as seen by the surgeon as incurable but are given tickets for statistical or other purposes.

TABLE XX.—LIST OF DISEASES.

TABLE XX.—LIST OF DISEASES (*continued*).

CORNEA :—

Ulceration, simple	5,744
,, hypopyon	369
,, perforation	1,965
,, special forms	93
Pannus	16,418
Keratitis, interstitial	17
,, trachomatous	159
Nebula or leucoma	41,395
Adherent leucoma	5,492
Totally opaque cornea...	5,033
Staphyloma	1,648
Xerosis of cornea...	348
Abscess of cornea	49
Conical cornea	341
Injuries (burn, foreign bodies, etc.)... ...	293
Granuloma of cornea	1

LIMBUS :—

Tumours...	19
------------------------	----

IRIS :—

Anterior synechia...	369
Posterior ,, 	511
Inflammation...	351
Iris bombé	28
Irido-dialysis...	49
Congenital coloboma	18
Aniridia	3
Persistent pupillary membrane... ...	5
Iridodonisis	89
Various	23

SCLEROTIC :—

Ciliary staphyloma	397
Episcleritis	5
Injuries	39

CHOROID :—

Coloboma	4
Rupture	3
Disseminated choroiditis	24
Choroido-retinitis...	17
Atrophy of choroid	52
Tumours...	1
Albinismus	3

RETINA :—

Retinitis, albuminuric and diabetic	9
,, syphilitic	7
,, pigmentosa	34
Detachment of retina	70
Embolism and thrombosis of retinal vessels ...	—
Glioma	1
Other conditions	16
Night blindness (in which retina pigmentosa is absent)	19

OPTIC NERVE:—

Neuritis	17
Atrophy	173
Opaque nerve fibres	8
Other conditions	2

TABLE XX.—LIST OF DISEASES (*continued*).

LENS :—

Cataract, senile	1,932
,, soft	167
,, traumatic	67
,, lamellar	4
,, anterior polar	517
,, posterior „	23
,, dislocated, traumatic ...	68
,, operative ...	13
,, congenital ...	10
Aphakia	366
Secondary cataract	185
Ectopia lentis	4

VITREOUS :—

Opacities	109
Foreign bodies	3

MUSCLES :—

Strabismus, alternating	219
,, convergent	1,919
,, divergent ...	2,095
Heterophoria	20
Nystagmus	471
Paralysis	18

GLAUCOMA :—

Primary, acute ...	56
,, sub-acute ...	79
,, chronic ...	2,119
Secondary	3,042

{ Including absolute glaucoma caused by acute, sub-acute, or chronic glaucoma.

GLOBE :—

Shrunken globe	4,390
Buphthalmos	18
Exophthalmic goitre	5
Panophthalmitis	196
Microphthalmos	21
Anophthalmos	36
Injury	65

ORBIT :—

Tumours	16
Cellulitis	19
Tenonitis	—
Periostitis	3
Injuries	7
Cyst, frontal	—
,, ethmoidal	—
Contracted socket ... /	29
Fly blown	10

BLIND :—

In one eye	10,566
In both eyes *	5,053

*Patients are accounted blind who cannot count fingers at one metre.

TABLE XXI.—LIST OF OPERATIONS.

TABLE XXII.—ACTUAL EXPENDITURE, CENTRAL ADMINISTRATION, 1920-1921.

CHAPTER.	Grant.	Expenditure.
	L.E.	L.E.
Pensionable staff	7,135	4,910
Hors cadre staff	305	275
Allowances :—		
Ophthalmic allowance	216	108
Compensation allowance	48	48
Transport, transfer, and travelling allowances :—		
Inspection allowance	384	240
Consolidated allowance	58	36
Transfer allowance	40	10
Travelling allowance	300	162
Transport	600	414
Books and periodicals	30	30
Telephone	7	7 *
Telegrams	30	11
Petty expenses	20	1
TOTAL...	9,173	6,252 †

* Excluding trunk line calls.

† This figure is very low owing to :—

(a) Two posts of divisional inspectors were vacant the whole year of 1920.

(b) One post of divisional inspector was filled only from October 1, 1920.

TABLE XXIII.—ACTUAL EXPENDITURE, GOVERNMENT OPHTHALMIC HOSPITALS, 1920-1921.

CHAPTER.	Grant.	Expenditure.
	L.E.	L.E.
Pensionable staff	8,561 *	7,358
Hors cadre staff	6,816	6,268
Ophthalmic allowance	1,608 †	1,252
Transport and travelling allowances	1,538	1,720
Food	5,418	6,852
Forage	51	9
Water	265	204
Light	180	155
Sewage	54	157
Heating	— ‡	790
Rent	100	66
Telegrams and telephones	118	108
Petty expenses	583	1,866
Stores :—		
General equipment		3,411
Surgical equipment		180
Instruments	6,835 §	291
Drugs		1,205
Dressings		328
Transport of stores		165
Books and periodicals	12	12
TOTAL...	32,139	32,397 ¶

* To this L.E. 201 is granted by the Government for the salary of a medical officer for the Daqahliya Provincial Council Travelling Ophthalmic Hospital which is recovered from the said Council.

† To this L.E. 72 is granted by the Government for the Ophthalmic allowance of a M.O. for the Daqahliya Prova Council Travelling Ophthalmic Hospital which is recovered from the said Council.

‡ No special grant for the ophthalmic hospitals. The grant is for the various units of the whole Department.

§ According to Central Stores letter dated August 6, 1918, No. 1276/29/20/5/12 maintenance of each permanent ophthalmic hospital is L.E. 475 per annum and L.E. 420 for each travelling ophthalmic hospital.

¶ (a) Excluding repairs being omitted as the credit is at the disposal of the Public Works Ministry and no return is made.

(b) Excess is due to the high cost in moving No. 3 Travelling Ophthalmic Hospital to remote localities.

TABLE XXIV.—ACTUAL EXPENDITURE, GOVERNMENT OPHTHALMIC HOSPITALS (PER UNIT), 1920–1921.

CHAPTER.	TOTAL.												
	Port-Said				Cairo Schools				Alexandria				
N. ^o . T.O.H.	N. ^o . S.O.H.	N. ^o . T.O.H.	N. ^o . T.O.H.	L.E.	L.E.	L.E.	L.E.	L.E.	L.E.	L.E.	L.E.	L.E.	
Pensionable staff	352	497	429	829	584	422	466	481	409	477	647	174
Hors cadre staff	414	665	426	449	499	153	126	387	433	446	417	92
Ophthalmic allowance	95	147	99	153	126	87	72	70	37	42	54	3
Transport and travelling allowance	307	199	272	88	183	33	64	74	67	93	72	67
Food	306	567	395	474	730	704	541	458	425	462	463	444
Forage...	—	—	5	—	4	—	—	—	—	—	—	—
Water	—	—	3	—	1	48	35	10	29	14	34	—
Light	—	—	7	—	—	26	36	45	40	—	—	—
Sewage	—	—	24	72	1	—	—	—	3	9	—	—
Heating	—	—	23	9	31	22	58	66	78	103	47	2
Rent	—	—	—	66	—	—	—	—	—	—	—	—
Telegrams and telephones	—	—	1	8	1	10	16	13	9	11	9	1
Stores :—													
General Equipment...	312	183	30	—	10	—	39	3	—	17	6	245
Surgical equipment	—	—	—	41	6	15	33	15	17	10	12	239
Instruments	—	—	30	90	67	165	88	42	88	69	37	27
Drugs	—	—	97	—	5	—	33	21	16	40	28	35
Dressings	—	—	—	6	—	28	12	12	12	11	12	46
Transport of stores	—	—	6	—	1	1	1	1	1	1	1	12
Books and periodicals	—	—	1	41	1,172	28	57	36	19	14	24	28
Petty expenses	—	—	361	—	—	—	—	—	—	—	—	—
Total ...	... 2,339	2,606	2,959	2,659	2,862	2,331	2,122	1,994	1,858	1,891	2,010	2,223	333
													15
													11
													32,397

* Including 20 per cent permanent increase ; but excluding war bonuses which were charged against a special credit of M. of Finance.

† Excluding upkeep of buildings, for which no account is kept by P.H.D. but by P.W.M.

TABLE XXXV.—ACTUAL EXPENDITURE, PROVINCIAL COUNCIL OPHTHALMIC HOSPITALS, 1920-1921.

CHAPTER.	GħARBIJA.			ASYŪT.			DAQAHЛИJA.		
	Expenditure.		Mahalla el Kūbra.	Expenditure Per Unit.		Grant.	Expenditure.		Expenditure.
	L.E.	I.E.		I.E.	Kafr el Zajjāt.		I.E.	I.E.	
Employees	810	728	251	245	194	306	306
Servants	456	518*	120	94	94	240	200
Transport and travelling allowance :—									
Travelling allowance					1		1
Railways					48		93
Sundry					36		29
Food					—		119
Water					—		130
Light and heating					6		—
Rent					12		17
General furniture :—							—		—
Equipment					11		115
Instruments					19		19
Drugs					83		83
Dressings					23		23
Stationery and periodicals					—		157
Post and telegrams					—		24
Petty expenses					—		93
Total...	2,052	2,047	539	545	963	494	559	929	1,421

* Excess due to charging salaries of the three Moawins of these hospitals against Provincial Council until October 31, 1920, although no provision was made for them in the hospital budget.

TABLE XXVI.—COMPARISON OF THE COST OF MAINTENANCE OF A PERMANENT
OPHTHALMIC HOSPITAL IN 1914 AND 1921.

	Number.	1914.	TOTAL.	Number	1921.	TOTAL.
		L.E.	L.E.		L.E.	L.E.
ART. 1.—Salaries, Wages, and Allowances :—						
A.—Pensionable Staff :—						
Medical Officers, 4th class	2	336		2	336	
Employee, 4th class	1	60		1	72	
			396			408
C.—Hors Cadre Staff :—						
Moawin	1	48		1	48	
Chief attendant	1	36		2	72	
Attendants (male)	2	42		5	105	
Attendants (female)	2	36		2	36	
Murasla	1	18		1	21	
Cook	1	24		1	36	
Boab	1	18		—	—	
Sundry subordinate staff	3	54		—	—	
Gardener	—	—	276	1	21	
	12	—		13	—	339
20 per cent rise of pay to personnel	—	—		—	—	149
40 per cent war gratuity	—	—		—	—	358
E.—Allowances	—	72		—	—	72
ART. 2.—Transport, Transfer, and Travelling Allowances :—						
Transport	—					
Transfer	—					
Travelling allowance	—		50	50	5	
					50	
					50	
					—	105
ART. 3.—Food	—	139		—	—	450
ART. 4.—Forage	—	—		—	—	—
ART. 5.—Rent, Water, Lighting, etc.:—						
Rent	—			—	—	
Water	—	30		—	40	
Lighting	—	40		—	50	
Heating	—	20		—	30	
Sewage	—	12		—	—	
			102	—	—	120
ART. 6.—Books and Periodicals	—	1		—	—	1
ART. 7.—Telegrams and Telephones :—						
Telegrams	—					
Telephones	—		9	9	2	
					10	
					—	12
ART. 8.—Petty Expenses	—	12		—	—	30
Equipment	—	300		—	—	475
TOTAL... ...			1,357			2,519

TABLE XXVII.—COST OF UNIFORM DIETS FOR ALL IN-PATIENTS AT OPHTHALMIC HOSPITALS DURING 1921, EXCLUDING COST OF RATIONS OF EMPLOYEES.

HOSPITALS.	Number of Diets issued.	Total Cost. *	Cost per Day per Head.
	L.E.	Mills.	
Daqahliya Travelling†, Simbellawein, Dekernis, and Matarîya	1,517	119	78·4
Sohâg	3,794	297	78·3
Mansûra	6,822	530	77·7
Asyût	7,322	538	73·5
Damanhûr	3,922	285	72·6
Faiyûm	2,778	199	71·5
Minya	5,589	390	69·7
Santa† Gharbiya Provincial Council	1,982	137	69·1
No. 3 Camp, Nag ^c Hammâdi and Aswân	3,734	249	66·6
Zagazig	4,807	320	66·5
No. 2 Camp, Gîza	5,728	364	63·6
Beni Suef	6,473	411	63·5
Shebîn el Kôm	5,269	326	61·9
Benha	5,273	317	60·1
Tanta	5,650	335	59·3
No. 1 Camp, Rôd el Farag	4,209	199	47·2
TOTAL...	74,869	5,016	66·9

* Fuel excluded.

† Rations of these hospitals are not supplied by contractors but bought locally.

Scale of Full Diet as given to all In-patients at all Ophthalmic Hospitals.

	Grammes.
Bread	600
Beef	150
Vegetables	150
Lentils	75
Rice	75
Milk	200
Artificial butter	25
Sugar	30
Salt	15

TABLE XXVIII.—NUMBER OF BEDS AT THE OPHTHALMIC HOSPITALS.

	First.	Third.
No. 1 Travelling	—	10
No. 2 Stationary	—	20
No. 3 Travelling	—	10
Tanta	—	20
Asyût	1	27
Mansûra	—	20
Beni Suef	—	16
Zagazig	—	16
Damanhûr	—	16
Shebîn el Kôm	—	16
Sohâg	—	16
Minya	—	16
Faiyûm	—	12
Benha	—	16
Alexandria	—	20
Port Said	—	6
Daqahliya	—	8
Santa	—	10

X.—PUBLICATIONS.

(A) Annual.

- (1) Annual Report on Ophthalmic Hospitals: 1912,* 1913,* 1914,* 1915 with 1916, 1917, 1918, 1919,* 1920, and 1921.
- (2) Bulletin of the Ophthalmological Society of Egypt: 1904 * with 1905, 1906 * with 1907, 1908 * with 1909,* 1910,* 1911,* 1912, 1913,* 1914, 1915, 1917,* 1918,* 1919,* 1920,* 1921, and 1922.

(B) Occasional.

- *(1) "Four Years' Work with the Ophthalmic Hospitals of Egypt." Annual Meeting, British Medical Association, 1907.
- (2) "The Relief of Eye Diseases in Egypt with some Consideration of the Incidence of Blindness and Trachoma." Sixteenth.
- (3) "The Egyptian Ophthalmic Hospitals." Annual Meeting, British Medical Association, 1910.
- *(4) "Ophthalmic Hospitals in Egypt." "Ophthalmic Record." U.S.A., 1910.
- (5) Communication read at the Fourth International Blind Congress in Cairo, February 1911. Published in "Ophthalmoscope," 1911.*
- (6) "What are the best means to adopt to avoid the spread of the forms of Ophthalmia which may lead to blindness."
- (7) "Egyptian Ophthalmic Hospitals and the War."
- *(8) "Les Divisions du Trachome, le Traitement de cette Affection et de ses Complications." By the Director, *Archives d'Ophthalmologie*, September 1911.
- (9) "Trachoma and its Complications in Egypt." By the Director, Ophthalmic Hospitals in Egypt, Cambridge University Press, London, 1913.

* These volumes are now exhausted.

The available copies of the Bulletin of the Ophthalmological Society of Egypt may be obtained from the Honorary Secretary, c/o Department of Public Health, Cairo. Price P.T. 20 or 4s. 6d. post free.

Government Press
1879-1922-375 ex.

التقرير السنوي التاسع عن أعمال قسم الرمد في سنة ١٩٣١

المقدمة

ان مستشفيات الرمد بالقطر المصري جديرة ببعض التمييز عما سواها من المستشفيات وذلك لأن هذه المستشفيات الخاصة وعددتها عشرون قد وضعت تحت ادارة واحدة . وتوحيد ادارة هذه المستشفيات فضلا عما فيه من مزية تسهيل عيادة عدد كبير من المرضى (اذ بلغ عدد المرضى الجدد الذين عولجوا في العام الماضي ١١٣,٠٠٠ وعدد العمليات التي أجريت ٦٥,٠٠٠ ويزيد عدد المرضى الذين عولجوا في قسم العيادة الخارجية عن المليون) فإنه يسهل أيضا تجربة طرق مختلفة من العمليات والعلاج على وتيرة منتظمة .

ويوجد خمسة مستشفيات متنقلة للرمد ثلاثة منها كبيرة ومستوفية المعدات والأدوات بحيث يمكن اجراء أي نوع من العمليات الرمدية فيها . واثنان صغيران ولكنهما يؤدىان عملا جزيل الفائدة .

ويوجد خمسة عشر مستشفى بنيت خصيصا للرمد في المديريات الأربع عشرة بالقطر المصري . وقد أنشئت هذه المستشفيات من تبرعات محلية وتتولى الحكومة الانفاق على معظمها وبعضها تتفق عليه مجالس المديريات وجار الانشاء مستشفيين في قنا والجيزة .

وأطباء مستشفيات الرمد كلهم مصريون يستغلون مع مدير انجلزي .

وفي خلال سنة ١٩٢١ حضر للمعالجة بالمستشفيات أكثر من ١٥,٠٠٠ مريضا كانوا اما فاقدي ابصار كلتا العينين او احداهما وهذا ما يقرب من نسبة ١٢ في المائة من مجموع عدد المرضى الذين كشف عليهم بالمستشفيات – وتبلغ اعمال المستشفيات أقصى كثرتها في الأشهر ما بين يونيو وأكتوبر ويحتمل أن يكون سبب ذلك اشتداد الحر في الأشهر المذكورة وانتشار عدوى أمراض العيون بواسطة الذباب ان صح ذلك وهو غير معلوم بالضبط ولكنه تحت البحث الآن .

ويوجد فرق عظيم بين الأرماد الصديدية الحادة وبين الرمد الحبيبي المزمن فان الأرماد الصديدية الحادة اذا لم تعالج يمكن أن تسبب العمى في أيام قليلة وهي السبب في ازدياد عدد المرضى بالمستشفيات في زمن اشتداد الحر . والرمد الحبيبي المزمن يصيب أكثر من ٩٥ في المائة من مجموع عدد السكان وينتج عن ذلك ضعف الأبصار في معظم الحالات وفقدة بالمرة في قليل منها .

ومن الأعمال الهامة التي يؤدىها قسم الرمد الكشف على تلاميذ المدارس الأميرية وعلاج المصاين منهم بأمراض العيون وحيث أن المعالجة الرمدية بهذه المدارس عن السنة الحالية لم تنته بعد فلم يتيسر عمل تقرير عنها ودرجها ضمن هذا .

وزارة الداخلية

مصلحة الصحة العمومية

التقرير السنوي التاسع
لقسم الرمد
عن سنة ١٩٢١
بقلم مدير مستشفيات الرمد

طبع بالمطبعة الأميرية بالقاهرة ١٩٢٢

ويطلب (إما مباشرة أو بواسطة أحد باعة الكتب) من قلم
نشر مطبوعات الحكومة بوزارة المالية (بوسنة الدواوين)
بالقاهرة

الثمن . . . ١٥٠ مليمًا